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between the plug 48 and the packer 50 in the wellbore 46, but other positionings and interconnections of the screen may be utilized without departing from the principles of the present invention.

In the method 60, sand flow inhibiting particulate matter 62, such as gravel, is deposited in the perforations 52. This operation of depositing the particulate matter 62 in the perforations 52 is commonly referred to as "prepacking" and is well known to those skilled in the art. Therefore, it will not be further described herein. However, it is to be clearly understood that any technique of depositing the particulate matter 62 in the perforations 52 may be utilized without departing from the principles of the present invention.

After the particulate matter 62 has been deposited in the perforations 52, the screen 10 is radially expanded from its initial radially reduced configuration to its radially enlarged configuration as described above. In one unique feature of the method 60, the filter element 12 contacts the inner side surface of the casing 54 adjacent the perforations 52 when the screen 10 is radially expanded.

Referring additionally now to FIG. 6, an enlarged cross-sectional view representatively illustrating the interface between the screen 10 and one of the perforations 52 is shown. In this view it may be clearly seen that the filter element 12 of the screen 10 is in contact with the casing 54 surrounding the illustrated perforation 52. In this manner, the screen 10 in its radially expanded configuration retains the particulate matter 62 within the perforation 52.

It will be readily appreciated by one skilled in the art that the method 60 eliminates the need for depositing gravel 42 (see FIG. 4) in the annulus 44 about the screen 10 for retaining the particulate matter 62 in the perforations 52, since the screen itself retains the particulate matter in the perforations. Note that it is not necessary for the filter element 12 of the screen 10 to be completely unpleated in the method 60.

Of course, many modifications, additions, deletions and other changes to the embodiments described above will be apparent to a person of ordinary skill in the art upon consideration of the above descriptions, and these changes are contemplated by the principles of the present invention. Accordingly, the foregoing detailed description is to be clearly understood as being given by way of illustration and example only, the spirit and scope of the present invention being limited solely by the appended claims.

What is claimed is:

1. An expandable well screen, comprising:

a pleated woven metal filter element, the filter element being radially expanded from a first radially compressed configuration to a second radially enlarged configuration, fluid flow through the well screen being filtered when the filter element is in the second configuration.

2. The screen according to claim 1, wherein the filter element is circumferentially continuous.

3. The screen according to claim 1, further comprising a perforated base pipe disposed within the filter element.

4. The screen according to claim 3, wherein the base pipe has opposite ends, each opposite end being circumferentially continuous and configured for sealing attachment to a tubular member.

5. The screen according to claim 1, wherein the filter element is substantially unpleated when in the second radially expanded configuration.

6. The screen according to claim 1, wherein the filter element includes a first layer of material with first openings

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therethrough, and a second layer of material with second openings therethrough, the second layer outwardly overlying the first layer, and the second openings being larger than the first openings.

7. A subterranean well system, comprising:

a wellbore intersecting a formation; and

a well screen disposed within the wellbore and filtering fluid flowing between the formation and the wellbore, the screen including a woven metal material filter element radially expanded from a first configuration in which the filter element is circumferentially pleated to a second radially enlarged configuration, fluid flow through the well screen being filtered when the filter element is in the second configuration.

8. The well system according to claim 7, wherein the filter element is substantially unpleated in the second radially enlarged configuration.

9. The well system according to claim 7, wherein the filter element includes a first layer of material with first openings therethrough, and a second layer of material with second openings therethrough, the second layer outwardly overlying the first layer, and the second openings being larger than the first openings.

10. The well system according to claim 7, wherein perforations extend into the formation, wherein the perforations have sand flow inhibiting particulate matter disposed therein, and wherein the filter element is positioned adjacent the perforations retaining the particulate matter within the perforations.

11. A subterranean well system, comprising:

a wellbore intersecting a formation; and

a well screen disposed within the wellbore and filtering fluid flowing between the formation and the wellbore, the screen including a filter element radially expanded from a first configuration in which the filter element is circumferentially pleated to a second radially enlarged configuration, the screen further including a perforated base pipe disposed within the filter element.

12. A subterranean well system, comprising:

a wellbore intersecting a formation; and

a well screen disposed within the wellbore and filtering fluid flowing between the formation and the wellbore, the screen including a filter element radially expanded from a first configuration in which the filter element is circumferentially pleated to a second radially enlarged configuration, the filter element being expanded to the second radially enlarged configuration with gravel in an annulus between the screen and the wellbore, the filter element urging the gravel to displace in the annulus about the screen when the filter element is expanded from the first to the second configuration.

13. A method of servicing a subterranean well, the method comprising the steps of:

conveying a screen into the well, the screen being in a first radially compressed configuration thereof, and the screen including a circumferentially pleated woven metal material filter element;

positioning the screen within the well; and

expanding the screen to a second radially enlarged configuration thereof, fluid flow through the screen being filtered when the screen is in the second configuration.

14. The method according to claim 13, wherein in the conveying step, the filter element includes a first layer of material with first openings therethrough, and a second layer of material with second openings therethrough, the second layer outwardly overlying the first layer, and the second openings being larger than the first openings.

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15. The method according to claim 13, further comprising the step of disposing sand flow inhibiting particulate matter in perforations extending outwardly into a formation intersected by a wellbore of the well before the expanding step.

16. The method according to claim 15, wherein the expanding step further comprises radially expanding the screen so that it is adjacent the perforations.

17. The method according to claim 16, wherein in the expanding step, the radially expanded screen retains the particulate matter in the perforations.

18. A method of servicing a subterranean well, the method comprising the steps of:

conveying a screen into the well, the screen being in a first radially compressed configuration thereof, the screen including a circumferentially pleated filter element, the screen further including a perforated base pipe disposed within the filter element;

positioning the screen within the well; and

expanding the screen to a second radially enlarged configuration thereof.

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19. The method according to claim 18, wherein the expanding step further comprises radially enlarging the base pipe.

20. A method of servicing a subterranean well, the method comprising the steps of:

conveying a screen into the well, the screen being in a first radially compressed configuration thereof, the screen including a circumferentially pleated filter element;

positioning the screen within the well; and

expanding the screen to a second radially enlarged configuration thereof by radially enlarging the screen within gravel disposed in an annulus formed between the screen and a wellbore of the well, fluid flow through the screen being filtered when the screen is in the second configuration.

21. The method according to claim 20, wherein the expanding step further comprises displacing the gravel in the annulus about the screen by expansion of the screen.

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